

# **THE OFFICE OF REGULATORY STAFF**

## **DIRECT TESTIMONY**

**OF**

**CAREY M. STITES**

**January 21, 2010**



**DOCKET NO. 2009-411-G**

**APPLICATION OF PIEDMONT NATURAL GAS COMPANY, INC. FOR  
APPROVAL OF ENERGY EFFICIENCY PROGRAMS**

January 21, 2010

Page 1 of 10

**DIRECT TESTIMONY OF CAREY M. STITES****FOR****THE OFFICE OF REGULATORY STAFF****DOCKET NO. 2009-411-G****IN RE: APPLICATION OF PIEDMONT NATURAL GAS COMPANY, INC. FOR****APPROVAL OF ENERGY EFFICIENCY PROGRAMS**

**PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND  
OCCUPATION.**

**A.** My name is Carey M. Stites. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina 29201. I am employed by the State of South Carolina as Manager of the Gas Department for the Office of Regulatory Staff (“ORS”).

**Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND  
EXPERIENCE.**

**A.** I received a Bachelor of Science Degree in Business Administration, with a major in Accounting from the University of South Carolina in Columbia. I was employed at that time in the electric and gas utility industry and gained twenty-five years (25) experience in this field. In October 2004, I began my employment with ORS. I have testified on numerous occasions before the Public Service Commission of South Carolina (“Commission”) in conjunction with various natural gas issues.

January 21, 2010

Page 2 of 10

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

**A.** The purpose of my testimony is to present the findings and recommendations of ORS regarding its review and analysis of Piedmont Natural Gas Company, Inc.'s ("Piedmont" or "Company") request for the approval to implement proposed energy efficiency programs and the Company's proposed cost recovery method.

**Q. FIRST, PLEASE DESCRIBE THE PROPOSED COST RECOVERY METHOD FOR THESE PROGRAMS.**

**A.** The Company requests that it recover the program cost on a delayed basis through Piedmont's annual Rate Stabilization Act ("RSA") process. ORS understands that Piedmont proposes to recover its program costs through residential and commercial rates.

**Q. IS PIEDMONT SEEKING TO RECOVER INCENTIVES AS PROVIDED FOR IN SOUTH CAROLINA CODE §58-37-20 FOR COST-EFFECTIVE ENERGY EFFICIENCY PROGRAMS?**

**A.** No. Piedmont is not requesting to recover incentives for its proposed energy efficiency programs in this docket. However, Piedmont states that it is reserving its right to propose such incentives in the future with respect to these programs or alternative programs the Company may propose.

**Q. PLEASE LIST PIEDMONT'S PROPOSED ENERGY EFFICIENCY PROGRAMS.**

January 21, 2010

Page 3 of 10

1 Piedmont has proposed to implement the following three (3) programs:

- 2 1. Customer Education Program;  
3 2. Residential Low-Income Energy Efficiency Program; and  
4 3. High Efficiency Equipment Rebate Program for residential and  
5 commercial customers.  
6

7 Under Piedmont's proposal, only existing Piedmont natural gas residential  
8 and commercial customers may qualify and participate in programs (2) and (3).

9 These two programs will not be available for new construction.

10 **Q. PLEASE STATE THE TOTAL ANNUAL DOLLAR AMOUNT THE**  
11 **COMPANY IS REQUESTING TO SPEND ON THESE THREE**  
12 **PROGRAMS.**

13 **A.** The Company is requesting to spend a maximum of \$350,000 on an annual  
14 basis. ORS estimates the overall rate impact of this amount to the average  
15 residential customer's annual bill would be an addition of less than approximately  
16 \$2.00 or .2%.

17 **Q. PLEASE GIVE A SUMMARY OF THE PROPOSED DOLLAR AMOUNT**  
18 **OF EXPENDITURES BY PROGRAM.**

19 **A.**

(1) Customer Education Program	\$ 50,000
(2) Residential Low-Income Weatherization	\$150,000
(3) High Efficiency Equipment Rebate Program	\$150,000
<b>TOTAL</b>	<b>\$350,000</b>

20

21 **Q. PLEASE PROVIDE AN OVERVIEW OF THE CUSTOMER EDUCATION**  
22 **PROGRAM.**

1     **A.**           This program will consist of a communications campaign with emphasis  
2           placed on energy education, efficiency and conservation messages. The Company  
3           will utilize bill inserts, other print advertisements, radio and/or other available  
4           media. Piedmont may sponsor energy efficiency and conservation education  
5           sessions in local schools. Also, Piedmont will encourage customers to take  
6           advantage of federal tax credits and other available incentives for installing high-  
7           efficiency natural gas equipment for water heating and space heating.

8     **Q.     PLEASE DISCUSS THE COST-EFFECTIVENESS RESULTS PROVIDED**  
9           **BY THE COMPANY FOR THIS PROGRAM AND THE OPINION OF**  
10          **ORS.**

11    **A.**           The Company is proposing to spend \$50,000 annually for this program. If  
12           approved, the Company states that although the cost-effectiveness of this program  
13           cannot be directly measured because Piedmont has no ready means to do so, the  
14           Company will survey its target audience to obtain estimates of this program's cost  
15           effectiveness. ORS does not object to this program being implemented.

16    **Q.     PLEASE PROVIDE AN OVERVIEW OF THE RESIDENTIAL LOW-**  
17          **INCOME ENERGY EFFICIENCY PROGRAM.**

18                   This program was modeled based upon the Federal Department of Energy's  
19           ("DOE") Weatherization Assistance Program. Since 1976 this Program has  
20           weatherized over 6.2 million homes.

21                   Through third-party energy contractors, this program will provide energy  
22           efficiency measures and weatherization assistance to low-income existing

Piedmont customers. The participants in this program will be limited to customers dwelling in single-family homes. If renting, customers living in single-family homes will be allowed to participate if the homeowner also consents. Piedmont will define a customer to be “low-income” if their household income is within 200% of the 2009 federal poverty income guidelines as established for the DOE Federal Weatherization Assistance Program. Piedmont proposes to give priority to eligible individuals with disabilities and eligible families with children.

Piedmont will coordinate with state and local agencies who administer the DOE Weatherization Program in identifying local energy contractors and/or local community action agencies to administer the program. If local energy contractors and community agencies are unable to assist, the Company may need to modify this program. ORS recommends that if the Company finds a modification to this program is needed, Piedmont should be required to give a 30 day prior notification to the Commission and ORS.

The third-party contractor will conduct a comprehensive in-home energy audit and identify energy saving measures for installation in participant’s homes. All participants will receive the installation of a carbon-monoxide detector, if one is not currently installed.

The measures to be offered may include:

- Sealing major air leaks in floors and ceilings;
- Insulating attic, side wall and/or floors;
- Sealing and insulating ducts;
- Installing programmable thermostat;
- Evaluating, cleaning, and tuning heating systems; and

January 21, 2010

Page 6 of 10

- Installing general heat waste measures (furnace filters, water heater insulation wrap, piping insulation, water-saving devices, and weather-stripping)

There will be no direct charge to the participants in this program. The estimated number of participants on an annual basis is 40 to 60. The cost of energy efficiency measures provided to each participant may range from \$1,500 to \$3,500 with Piedmont anticipating the average cost to be \$3,000 per participant.

**Q. PLEASE DISCUSS THE COST-EFFECTIVENESS RESULTS PROVIDED BY THE COMPANY FOR THIS PROGRAM AND THE OPINION OF ORS.**

Piedmont proposes to spend \$150,000 per year on this program, and states that part of the \$150,000 will be dedicated to the measurement and verification of program results, but gave no dollar amount estimates. The Company was unable to provide any specific projected cost-effectiveness results for this proposed program in South Carolina. However, it stated that according to the DOE's Weatherization Assistance program, the program on average reduces heating bills by up to 32% and overall energy bills by about \$350 per year. In addition, the Company has experience administering a similar low-income program in North Carolina and anticipates that the participants in this program will experience similar benefits as the North Carolina participants. The Company felt that performing cost-effectiveness tests will not establish whether the program is truly cost-effective because it provides societal benefits that are difficult to quantify. ORS believes

1 energy-efficiency benefits should result from this low-income weatherization  
2 program and does not object to the Company implementing this program.

3 **Q. PLEASE PROVIDE AN OVERVIEW OF THE HIGH EFFICIENCY**  
4 **EQUIPMENT REBATE PROGRAM.**

5 This program will provide rebates to existing residential customers who  
6 purchase and install high efficiency natural gas water or space heating equipment  
7 and existing commercial customers who replace natural gas water heating  
8 equipment with high efficiency equipment. Piedmont developed the program  
9 energy efficiency requirements using the same minimum efficiency standards as  
10 those set by "Energy Star®" for natural gas equipment. The Company plans to  
11 communicate this program to its customers through bill inserts, bill messages, and  
12 advertising on its website and may also contact equipment manufacturers,  
13 distributors and installers about the program.

14 Each customer will be required to submit a rebate application, along with  
15 proof of purchase and installation of the qualifying equipment. Upon approval of  
16 the customer's application, a rebate check will be mailed to the customer.

17 Piedmont proposes to initially offer rebates in the range of \$50 to \$300, but  
18 has requested to reserve the right to retain some flexibility to adjust these amounts  
19 if necessary. ORS recommends that if the Company finds an adjustment to the  
20 rebate amount is needed, Piedmont should be required to give a 30 day prior  
21 notification to ORS.



January 21, 2010

Page 8 of 10

1 **Q. PLEASE PROVIDE A SUMMARY OF THE COMPANY'S PROPOSED**  
2 **QUALIFYING EQUIPMENT, REBATES AND CORRESPONDING**  
3 **EFFICIENCY REQUIREMENTS AS STATED IN ITS PETITION.**

4 **Residential Summary:**

Equipment	Initial (Maximum) Rebate Amount	Minimum Required Efficiency (1)
Natural Gas Storage Tank Water Heater	\$ 50	EF = .062 (or higher)
Natural Gas Tankless Water Heater	\$ 250	EF = .082 (or higher)
Natural Gas Forced Air Furnace	\$ 300	AFUE = 90% (or higher)

5  
6 **Commercial Summary:**

Natural Gas Tankless Water Heater	\$ 250	EF = .082 (or higher)
-----------------------------------	--------	-----------------------

7 **NOTE: (1) EF is the Energy Factor; AFUE is the Annual Fuel Utilization Efficiency**  
8

9 **Q. PLEASE PROVIDE A SUMMARY OF THE COMPANY'S PROPOSED**  
10 **COST OF IMPLEMENTING THIS PROGRAM AS STATED IN ITS**  
11 **PETITION.**

12

Program Development and Administration	\$ 12,500
Communications	\$ 10,000
Rebates	\$112,500
Evaluation, Measurement & Verification	\$ 15,000
<b>TOTAL</b>	<b>\$150,000</b>

13

1 **Q. PLEASE DISCUSS THE COST-EFFECTIVENESS RESULTS PROVIDED**  
2 **BY THE COMPANY FOR THIS PROGRAM AND THE OPINION OF**  
3 **ORS.**

4 Piedmont followed the benefit-cost tests protocols set by the California  
5 Standard Practice Manual used in evaluating utility energy efficiency programs. A  
6 test with a value greater than 1.0 demonstrates that, based on the analytical model,  
7 the program would be an effective program. The tests for Piedmont's proposed  
8 High Efficiency Rebate Program were performed by a third-party consultant. The  
9 Company provided the results of the Total Resource Cost Test ("TRC") and the  
10 Utility Cost Test ("UCT"), also known as the Program Administrator Cost Test.  
11 The TRC produced a result of 1.24 and the UCT produced a result of 1.97.

12 ORS met with Company representatives and reviewed the data used and  
13 results provided by both the Company and their consultants. ORS found that the  
14 tests were performed in compliance to utility standards. The results were  
15 reasonable. ORS believes energy-efficiency benefits should result from this  
16 proposed high efficiency equipment program and does not object to the Company  
17 implementing this program.

18 **Q. PLEASE DISCUSS OTHER ORS RECOMMENDATIONS REGARDING**  
19 **THE IMPLEMENTATION OF PIEDMONT'S PROPOSED ENERGY**  
20 **EFFICIENCY PROGRAMS.**

21 **A.** ORS recommends that the Commission approve Piedmont's proposed  
22 energy efficiency program on a three (3) year experimental basis. ORS also

January 21, 2010

Page 10 of 10

1 recommends that the Commission require Piedmont to file annual reports with the  
2 Commission and ORS based on the results for the twelve months test period ending  
3 March 31 by June 15 each year, with the first report due in 2011. This schedule  
4 would coincide to the time periods set forth in the RSA. These annual reports shall  
5 include specific detailed information for each program including expenditures,  
6 number of participants for the Residential Low-Income Weatherization program  
7 and the High Efficiency Equipment Rebate Program, an analysis of the cost-  
8 effectiveness of these programs, any other pertinent information the Company  
9 thinks should be reported, as well as any modifications to the programs.

10 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

11 **A.** Yes, it does.

**BEFORE**  
**THE PUBLIC SERVICE COMMISSION**  
**OF SOUTH CAROLINA**  
**DOCKET NO. 2009-411-G**


IN RE:

Application of Piedmont Natural Gas	)	
Company, Incorporated for Approval of	)	<b>CERTIFICATE OF</b>
Energy Efficiency Programs	)	<b>SERVICE</b>
	)	
	)	

This is to certify that I, Chrystal L. Morgan, have this date served one (1) copy of the **DIRECT TESTIMONY OF CAREY M. STITES** in the above-referenced matter to the person(s) named below by causing said copy to be deposited in the United States Postal Service, first class postage prepaid and affixed thereto, and addressed as shown below:

Scott M. Tyler, Counsel  
James H. Jeffries, IV, Counsel  
Moore & Van Allen, PLLC  
100 North Tryon Street, Suite 4700  
Charlotte, NC, 28202-4003

Jane Lewis-Raymond, Vice President and General Counsel  
Piedmont Natural Gas Company, Incorporated  
Post Office Box 33068  
Charlotte, NC, 28233

  
\_\_\_\_\_  
Chrystal L. Morgan

January 21, 2010  
Columbia, South Carolina